Application No. 10/716,608
Amendment dated October 31, 2005

Reply to Office Action of August 31, 2005

**AMENDMENTS TO THE CLAIMS** 

1. (Currently Amended) An electroconductive rubber roller whose having an

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outermost layer consists of a rubber layer made of a rubber composition containing an

ionic-conductive rubber as a main component thereof,

wherein a the surface of said outermost rubber layer consists of comprises an

oxide film formed by oxidation of the outermost rubber layer by irradiating with ultraviolet

rays and/or ozone; and said rubber composition contains a dielectric loss tangent-

adjusting filler to set a dielectric loss tangent of said electroconductive rubber roller to

0.1 to 1.5.

2. (Currently Amended) The electroconductive rubber roller according to claim 1,

wherein a weak electroconductive carbon black having an average diameter of 40 nm to

200 nm and/or a calcium carbonate treated with a fatty acid are used as said dielectric

loss tangent-adjusting filler.

3. (Currently Amended) The electroconductive rubber roller according to claim 1,

wherein supposing that an electric resistance of said electroconductive rubber roller is

R100 when a voltage of 100V is applied thereto and is R500 when a voltage of 500V is

applied thereto, the following relationship establishes:

logR100-logR500<0.5 \_

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4. (Currently Amended) The electroconductive rubber roller according to claim 2,

wherein supposing that an electric resistance of said electroconductive rubber roller is

R100 when a voltage of 100V is applied thereto and is R500 when a voltage of 500V is

applied thereto, the following relationship establishes:

logR100-logR500<0.5 .

5. (Currently Amended) The electroconductive rubber roller according to claim 1,

wherein not less than 5 nor more than 70 parts by weight of [[said]] weak

electroconductive carbon black is added to 100 parts by weight of said rubber

component contained in said rubber composition.

6. (Original) The electroconductive rubber roller according to claim 2, wherein not

less than 5 nor more than 70 parts by weight of said weak electroconductive carbon

black is added to 100 parts by weight of said rubber component contained in said

rubber composition.

7. (Currently Amended) The electroconductive rubber roller according to claim 3,

wherein not less than 5 nor more than 70 parts by weight of [[said]] weak

electroconductive carbon black is added to 100 parts by weight of said rubber

component contained in said rubber composition.

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8. (Original) The electroconductive rubber roller according to claim 4, wherein not

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less than 5 nor more than 70 parts by weight of said weak electroconductive carbon

black is added to 100 parts by weight of said rubber component contained in said

rubber composition.

9. (Currently Amended) The electroconductive rubber roller according to claim 1,

wherein not less than 30 nor more than 80 parts by weight of [[said]] a calcium

carbonate treated with [[said]] a fatty acid is added to 100 parts by weight of said rubber

component contained in said rubber composition.

10. (Original) The electroconductive rubber roller according to claim 2, wherein

not less than 30 nor more than 80 parts by weight of said calcium carbonate treated

with said fatty acid is added to 100 parts by weight of said rubber component contained

in said rubber composition.

11. (Currently Amended) The electroconductive rubber roller according to claim

3, wherein not less than 30 nor more than 80 parts by weight of [[said]] a calcium

carbonate treated with [[said]] a fatty acid is added to 100 parts by weight of said rubber

component contained in said rubber composition.

12. (Original) The electroconductive rubber roller according to claim 4, wherein

not less than 30 nor more than 80 parts by weight of said calcium carbonate treated

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with said fatty acid is added to 100 parts by weight of said rubber component contained

in said rubber composition.

13. (Original) The electroconductive rubber roller, according to claim 1, which is

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used as a development roller for making toner adhere to a photosensitive member of an

image-forming mechanism of an electrophotographic apparatus.

14. (Original) The electroconductive rubber roller, according to claim 2, which is

used as a development roller for making toner adhere to a photosensitive member of an

image-forming mechanism of an electrophotographic apparatus.

15. (Original) The electroconductive rubber roller, according to claim 3, which is

used as a development roller for making toner adhere to a photosensitive member of an

image-forming mechanism of an electrophotographic apparatus.

16. (Original) The electroconductive rubber roller, according to claim 4, which is

used as a development roller for making toner adhere to a photosensitive member of an

image-forming mechanism of an electrophotographic apparatus.

17. (New) An electroconductive rubber roller which is used as a development

roller used for single-component toner and having an outermost rubber layer made of a

rubber composition containing an ionic-conductive rubber as a main component thereof,

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wherein said rubber layer has a thickness of 0.5 mm to 10 mm and a surface of said outermost rubber layer comprises an oxide film formed by oxidation of the outermost rubber; and said rubber composition contains a dielectric loss tangent-adjusting filler to set a dielectric loss tangent of said electroconductive rubber roller to 0.1 to 1.5.